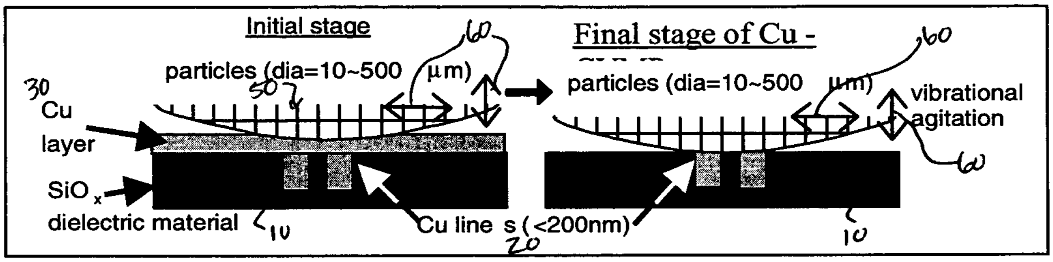
Figure 1



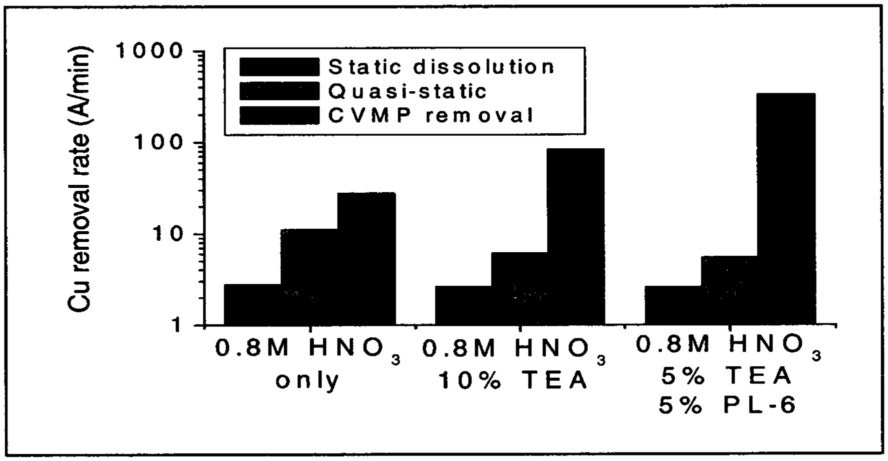


Figure 2. Comparison of copper removal rates at static, quasi-static, and CVMP conditions at different chemical compositions.

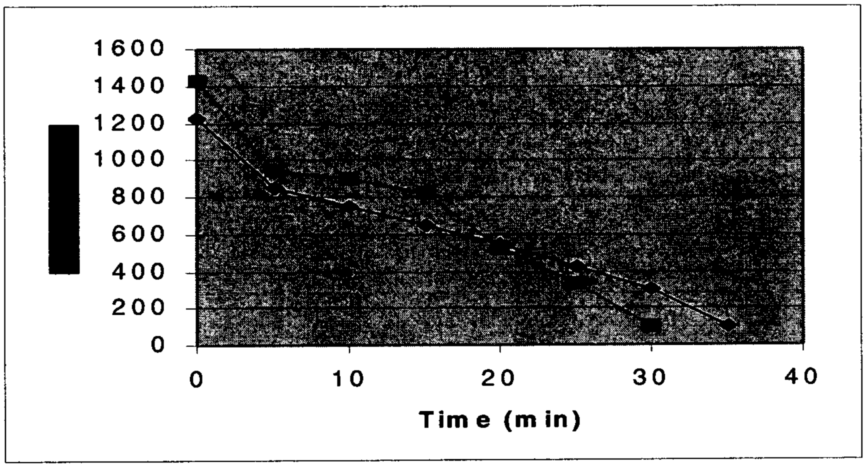


Figure 3. Cu film thickness as a function of CVMP treatment time. Chemical composition of the slurry = 0.8M HNO_3(aq), 5% tea, 5% PL-6.

Figure 4

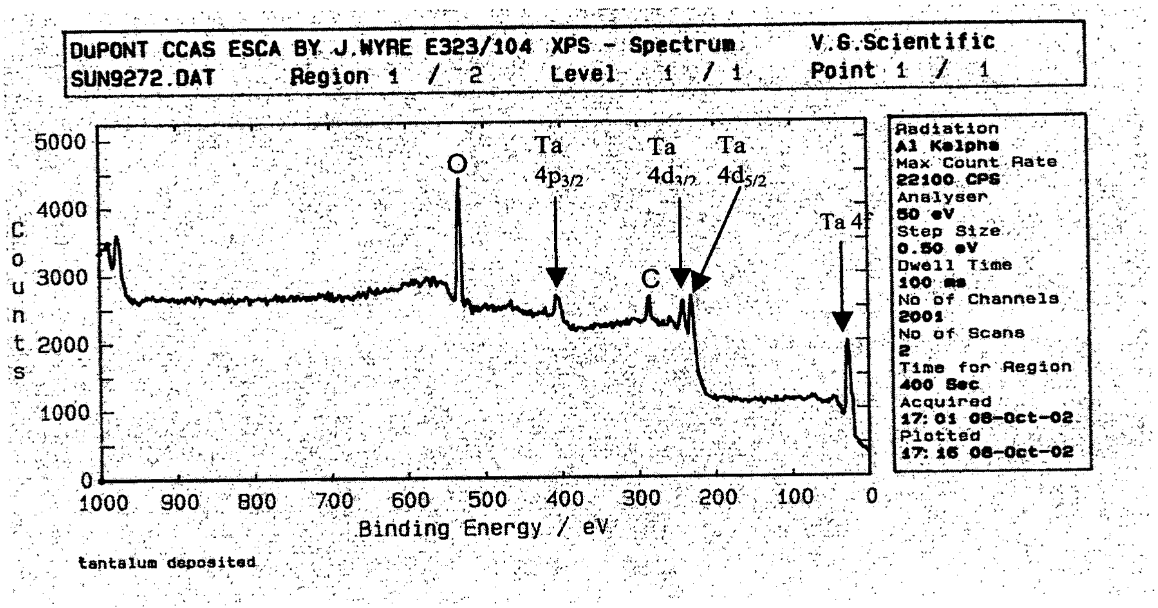


Figure 5

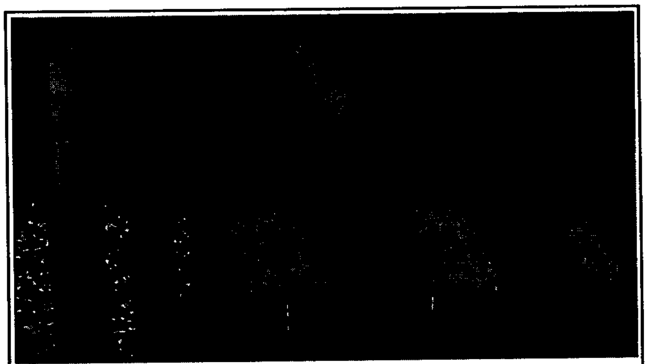


Figure 5. AFM images of copper patterns revealed after CVMP process: Chemicals = 0.8M HNO3 (aq), 5% TEA, 5% PL-6; Media = cylindrical-shape alumina (2~3mm); CVMP time = 6min. Images: top= topography; bottom=conductance)

Figure 6a

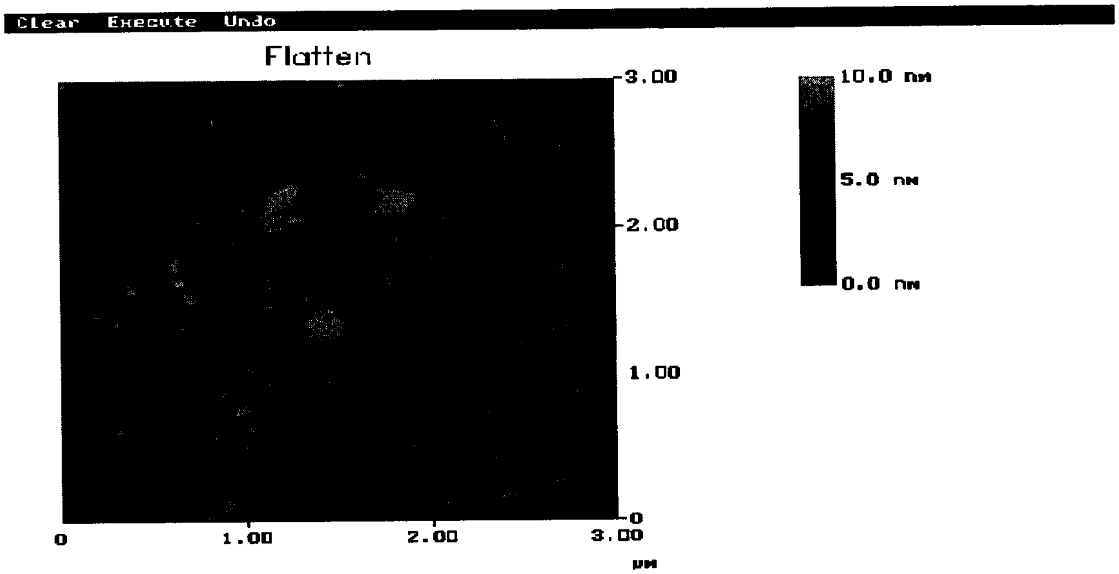


Figure 6b

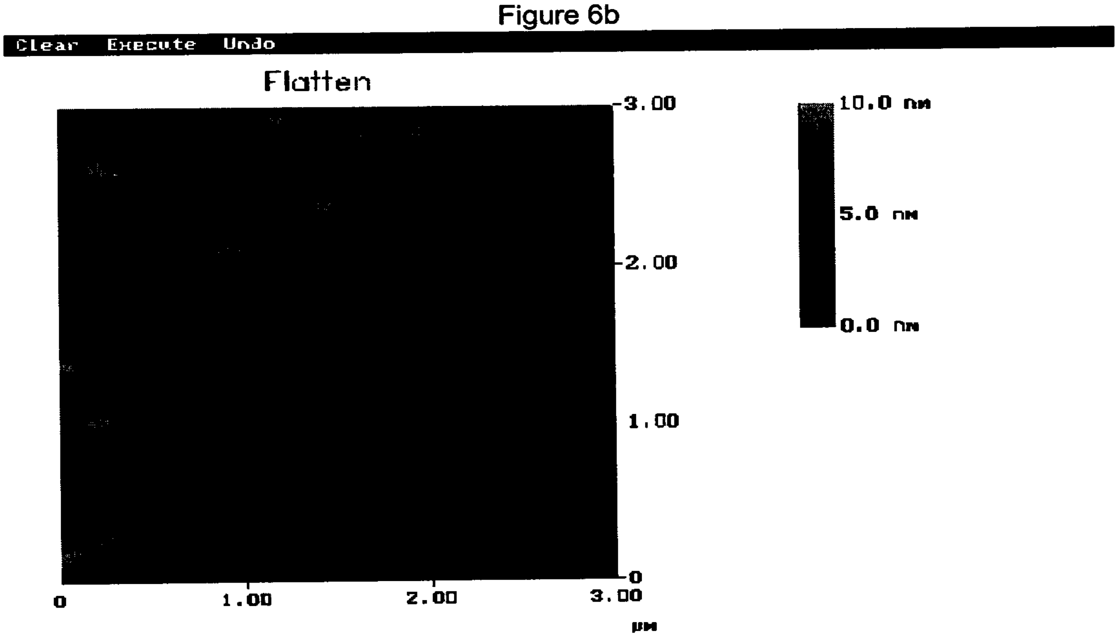
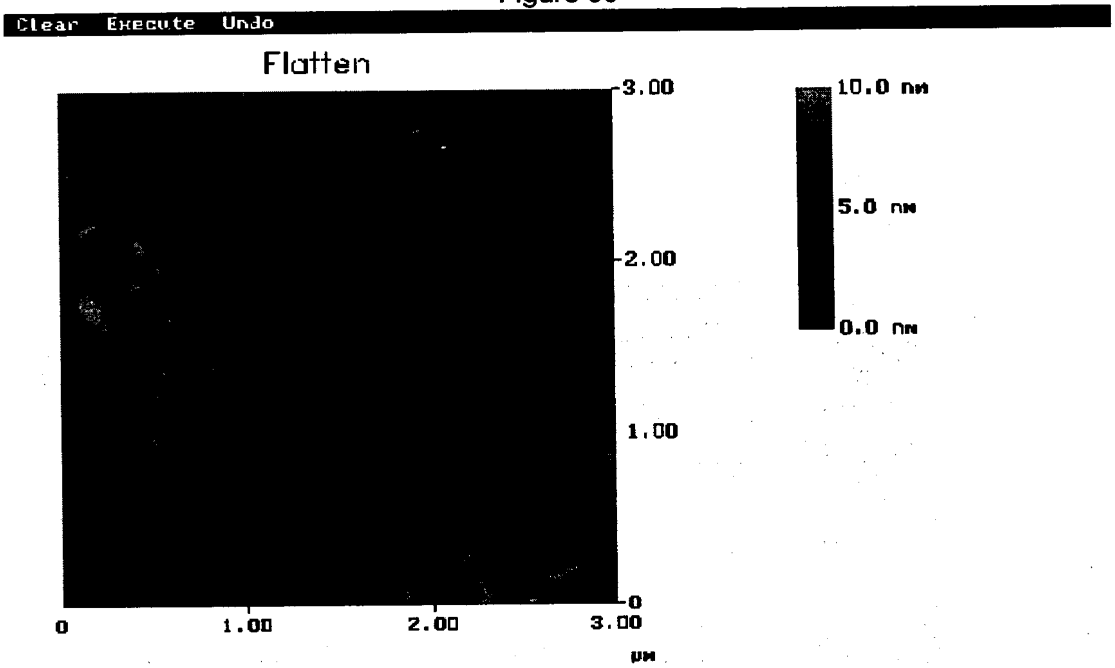


Figure 6c


Clear
Execute
Undo
Flatten
3.00
2.00
1.00
0
0
1.00
2.00
3.00
µm
10.0 nm
5.0 nm
0.0 nm